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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,122	10/04/2005	Takayuki Yako	P02052US2A	4092
48985	7590	11/29/2007	EXAMINER	
BRIDGESTONE AMERICAS HOLDING, INC. 1200 FIRESTONE PARKWAY AKRON, OH 44317			RABAGO, ROBERTO	
		ART UNIT	PAPER NUMBER	
		1796		
		MAIL DATE	DELIVERY MODE	
		11/29/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/552,122	YAKO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Roberto Rábago	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 June 2007.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 15-37 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 15-37 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/12/2007</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 15, 16, 18, 19, 23, 24, 26, 28, 29, 35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over DuBois et al. (US 5,336,726).

The reference discloses butadiene polymers having terminal silyl groups, wherein the polymer is made under living anionic polymerization conditions using a lithium monofunctional or difunctional initiator, and wherein the polymer has molecular weight of up to 10,000 and a 1,2-addition content of 40-70% (col. 1, line 64 through col. 4, line 5). The primary use is as a component of conventional compositions such as coatings, sealants and binders (col. 3, lines 53-55), and would therefore be expected to be combined with conventional adjuvants of such materials, such as fillers, reinforcing agents, modifiers, etc. The instant claims include  $M_w$  of "about 10,000" which includes an expanded range around the stated end point, and therefore the reference disclosure of molecular weight up to 10,000 would include a substantial range within the claimed scope. The claimed polydispersity would be inherently obtained by the reference method because a living anionic polymerization of butadiene using a lithium initiator is

well known to produce polydispersities within the claimed range. Polyfunctional initiators and a description of initiator residues are disclosed at col. 2, lines 4-24. The use of diethyl ether or glyme (ethylene glycol dimethyl ether) for control of 1,2-content is disclosed at col. 2, lines 25-38. Regarding claim 28, one of ordinary skill in the art would be motivated to use the claimed amount of initiator for making the reference polymer because applicants have claimed virtually the entire conventional range of initiator quantity when using a lithium initiator for living anionic polymerization.

Tetrasubstituted silicon terminating agents are disclosed at col. 3, lines 25-27.

In sum, the claimed composition would be obvious because the reference has explained how to assemble the functionalized butadiene composition and provided a number of alternative embodiments and features which would result in compositions within the claimed scope, said alternative embodiments and features constituting a finite number of predictable polymer compositions.

Claim 30 is not rejected over this reference because the term "additional monomer units" is understood to require an additional type of monomer other than that required in the parent claim. If applicants disagree with this interpretation, they should provide another definition and state where support exists in the specification as filed.

### ***Double Patenting***

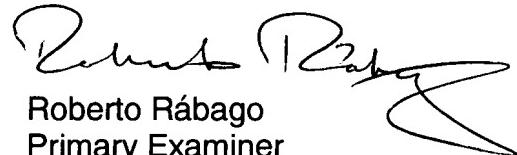
3. Claims 15-37 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 6,737,470 for the reasons set forth in item 3 of the Office action mailed 6/13/2007. The terminal

disclaimer filed 9/12/2007 is insufficient because the application to which the disclaimer applies has been improperly identified since the number used to identify the application is incorrect. The disclaimer states that the application at issue is 10/522,122; the correct number is 10/552,122.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Roberto Rábago  
Primary Examiner  
Art Unit 1796

RR  
November 26, 2007